

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): A device for injecting cooling air into a turbomachine turbine rotor, the device comprising a plurality of injectors distributed regularly around a longitudinal axis of the turbomachine and mounted between an inner shroud and an outer shroud, each injector of aerodynamic profile comprising, between a leading edge and a trailing edge, a suction side wall and a pressure side wall, the cooling air passing through the injectors being ejected towards through orifices in the turbine rotor via a flow section forming an aerodynamic throat between the trailing edge of one injector and the suction side wall of an immediately adjacent injector, wherein, in order to modify the section of the aerodynamic throat as a function of the temperature of the cooling air passing through the injectors, each injector comprises a bimetallic structure with a first metal material forming a major portion of the structure of the injector and having a first coefficient of thermal expansion, and a second metal material forming a complementary portion of the structure in the vicinity of the suction side wall meeting the trailing edge of the injector, and having a second coefficient of thermal expansion that is smaller than the first.

Claim 2 (Currently Amended): The [[A]] device for injecting cooling air according to claim 1, wherein said first and second metal materials are assembled together by welding or brazing.

Claim 3 (Currently Amended): The [[A]] cooling air injection device according to claim 1, wherein said first metal material is selected from nickel-based alloys.

Claim 4 (Currently Amended): The [[A]] cooling air injection device according to claim 1, wherein said second metal material is selected from nickel- or titanium-based alloys.

Claim 5 (Currently Amended): The [[A]] cooling air injection device according to claim 1, wherein each injector is fixed to the inner and outer shrouds by a bolted connection so as to ensure a precise setting angle.

Claim 6 (Currently Amended): The [[A]] cooling air injection device according to claim 1, wherein each injector presents reduced height over a ~~determined~~ length adjacent to its trailing edge so as to leave the aerodynamic throat free to expand.

Claim 7 (New): A device for injecting cooling air into a turbomachine turbine rotor comprising:

a plurality of injectors distributed regularly around a longitudinal axis of the turbomachine and mounted between an inner shroud and an outer shroud, each injector of aerodynamic profile including, between a leading edge and a trailing edge,

a suction side wall, and

a pressure side wall,

the cooling air passing through the injectors being ejected towards through orifices in the turbine rotor via a flow section forming an aerodynamic throat between the trailing edge of one injector and the suction side wall of an immediately adjacent injector,

wherein each injector comprises,

a leading edge portion including a first metal material having a first coefficient of thermal expansion, and

a trailing edge portion including the first material and a second metal material forming a complementary portion on a suction side of the injector, said second material having a second coefficient of thermal expansion that is smaller than the first, wherein said leading edge portion is free of said second metal material.

Claim 8 (New): The device for injecting cooling air according to claim 7, wherein said first and second metal materials are assembled together by welding or brazing.

Claim 9 (New): The cooling air injection device according to claim 7, wherein said first metal material is selected from nickel-based alloys.

Claim 10 (New): The cooling air injection device according to claim 7, wherein said second metal material is selected from nickel- or titanium-based alloys.

Claim 11 (New): The cooling air injection device according to claim 7, wherein each injector is fixed to the inner and outer shrouds by a bolted connection so as to ensure a precise setting angle.

Claim 12 (New): The cooling air injection device according to claim 7, wherein each injector presents reduced height over a length adjacent to its trailing edge so as to leave the aerodynamic throat free to expand.

Claim 13 (New): The cooling air injection device according to claim 7, wherein said leading edge portion includes only said first metal material.

Claim 14 (New): The cooling air injection device according to claim 7, wherein said second metal material is only included in said trailing edge portion.

Claim 15 (New): The cooling air injection device according to claim 7, wherein only said trailing edge portion includes both said first and said second metal materials.

Claim 16 (New): A method for making an injector for a cooling injection device comprising:

joining a first material with a second material to form a bimetallic structure, said first material having a first second coefficient of thermal expansion, said second material having a second coefficient of thermal expansion that is smaller than the first;

forming an injector from the bimetallic structure, said injector having,

a leading edge portion including the first metal material, and

a trailing edge portion including the first material and the second metal material, the second material forming a complementary portion on a suction side of the injector,

wherein said leading edge portion is free of said second metal material.

Claim 17 (New): The method for making an injector according to claim 16, wherein said joining includes joining said first and second metal materials together by welding or brazing.

Claim 18 (New): The method for making an injector according to claim 16, wherein said forming includes forming said injector by electroerosion, laser cutting, or cutting said bimetallic structure with a jet of water.

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Claim 19 (New): The method for making an injector according to claim 16, wherein said first metal material is selected from nickel-based alloys.

Claim 20 (New): The method for making an injector according to claim 16, wherein said second metal material is selected from nickel- or titanium-based alloys.